Streamlining Effluent Treatment with Pexgol



Innovation and improvement in fluid transportation in the oil and gas industry.



Pan American Energy Argentina | 2023

Working Conditions

Temperature: 50°C / 122°F Flow: 18 m³/h Pressure: 6 Kg/cm²g Density: 1007,2kg/m³ Total dissolved solids: 180°C 1.750mg/ Total Petroleum Hydrocarbons: <0,2mg/l Total hardness: <10mg/l

Pexgol Pipe

Pexgol 180 mm (6"), class 15

Application

Water Transpor

Length

2322 m / 7618 f

The Challenge

Pan American Energy LLC (PAE), an oil and gas exploration and production company with hydrocarbon reserves in Argentina, Bolivia, and Chile, faced a specific challenge at its waste management center in Argentina.

The goal was to pump the fluid, mostly water, generated in the gas scrubbers and stored in a sump tank to the effluent treatment plant. This fluid had specific characteristics, including a density of 1007.2 kg/m³, Total Dissolved Solids 180°C of 1,750 mg/l, Total Petroleum Hydrocarbons <0.2 mg/l, and Total Hardness <10 mg/l. The fluid was transported at a temperature of 50°C, a flow rate of 18 m³/h, and a pressure of 6 kg/cm²g.

The Solution

The chosen solution to overcome this challenge was the 6" (180 mm, Class 15) Pexgol piping, known for its quick installation, lightness, ease of handling, and ability to be transported in long lengths and rolls.

The piping installation process was relatively fast, requiring only 8 days for complete assembly. The pipe was unrolled and fused through electrofusion, a process known for its efficiency. To facilitate the installation and ensure proper functioning, Pexgol provided electrofusion training services, guaranteeing the correct handling and installation of the material.

By opting for Pexgol piping, Pan American Energy was able to efficiently and safely transport the fluid from its sump tank to the effluent treatment plant, demonstrating the effectiveness and adaptability of Pexgol piping to different environments and challenges.











The Advantages of Pexgol Pipe Systems







High resistance to wear

Pexgol is the preferred solution for abrasive materials transportation. Typically resists three times more than HDPE and twice more than steel.



Superb internal and external corrosion resistance

Our pipes are proven to withstand decades of exposure to corrosive environments, with nonstop performance in some of the world's harshest environments.



Excellent chemical and corrosion resistance

Pexgol pipes can resist a wide range of chemical agents, slurries, toxic and radioactive materials.



Long pipe sections

Pexgol pipes can be supplied in long coil lengths, reducing number of joints, installation time and risks.



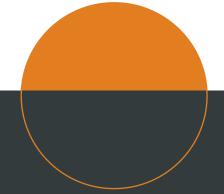
High temperature resistance

Working temperatures can range from -50°C/-58°F up to 110°C/230°F.



Creep and impact resistance

Pexgol pipes can withstand high amounts of axial and radial stresses and are highly resistant to impact, fracture and fatigue. Furthermore, Pexgol pipes are completely resistant to cracks even when dragged over sharp rocky terrain and coagulated salt crystals.



For more information please visit: pexgol.com